

## **Abstract**

A model based controller system and method for an industrial process including crystallization is disclosed. The system and method includes a model including a crystallization process step, a controller that generates a control command, a crystallization component responsive to that control command, wherein the crystallization component receives the control command from the controller, and wherein the crystallization component sends a component information element to the controller, and a communication environment that communicatively coordinates the model with the controller, wherein the control command is generated in accordance with the process step, and wherein the crystallization process step is varied in accordance with the component information element.